STRATEGIC ISSUES IN CANADIAN ARCTIC WATERS

By Edgar J. Dosman
Associate Professor of Political Science
York University, Ontario

Strategic issues in Canadian Arctic waters

by Edgar J Dosman

Associate Professor of Political Science, York University, Ontario

THE PRESENT STRATEGIC situation in Canada's vast Arctic waters is most usefully approached from a dual perspective – first, the region's military significance in the NATO-Warsaw Pact rivalry; and second, the changing situation in the Canadian High Arctic where hydrocarbon discoveries could transform its economic significance. Militarily, NATO is concerned at the rapid growth in Soviet naval and submarine capabilities. As a member of the Alliance, Canada shares the threat as well as a joint responsibility to counter it. But the progressive opening of the Canadian Arctic along with the possibility of large oil and gas discoveries (as well as rich confirmed mineral deposits) also confronts Ottawa with the problem of maintaining its Northern sovereignty and controlling the pace and pattern of resource development. Unfortunately Canada's chief rival in this area is not the Soviet Union but the United States – its closest ally and friend.

It is an awkward situation, and Canada has found it easier to respond to its traditional NATO naval role than to the rapidly changing policy environment in Arctic waters. The logical point of departure in examining developments in the area is therefore to examine current great power rivalry at sea.

The Soviet threat

The Arctic Ocean is in some ways comparable to the Mediterranean, lying as it does between important continents and having the potential to offer a short route of communication between them. From a strategic point of view there is an even more interesting parallel – their restricted exits to the main oceans of the world. Just as the Mediterranean has only two exits, so the Arctic is closed except for the Greenland-Iceland-United Kingdom (G-I-UK) gap, the Davis Strait and the Bering Sea.

These exits are crucial for the Soviet Union. Geopolitically her naval options are very restricted: the Denmark Strait and the Dardanelles are easily closed, and her ports in the Sea of Japan and the Sea of Okhotsk face ice-infested waters and the proximity of Japanese islands. The Arctic Ocean is therefore of central strategic significance for the Soviet Union; Murmansk is the largest naval and submarine base in the world.

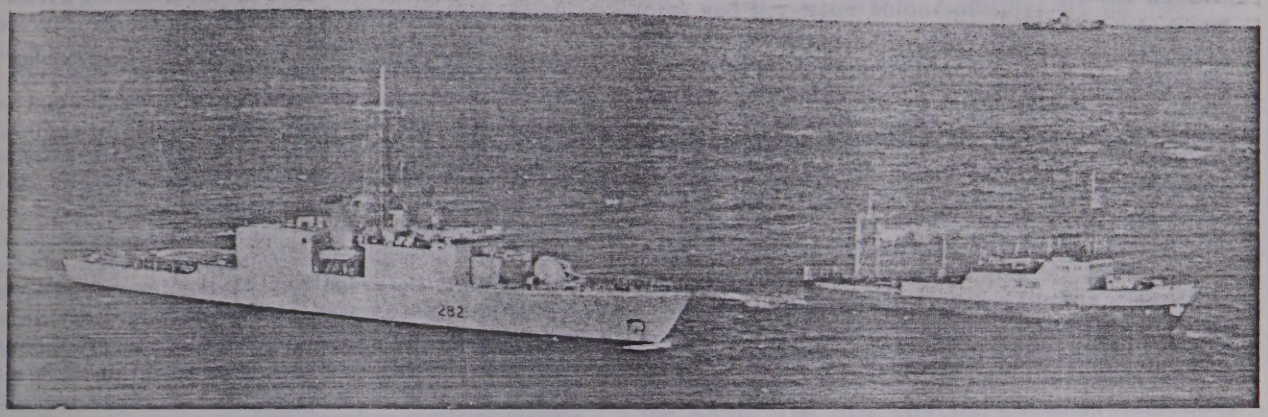
Understandably, control of the Arctic exits has become a key concern of NATO, and of SACLANT in particular, since if Soviet vessels could pass freely through the exits they would have easy access into the Atlantic from Murmansk. From NATO's point of view, the spectacular Soviet build-up since the Cuban missile crisis has exceeded legitimate purposes of coastal defence and now possesses a wide-ranging capability for sea-denial. The long Atlantic sea-lanes, the lynchpin of Western European re-supply in the event of conflict, lie exposed.

The emergence of the Soviet naval threat in North Atlantic waters has not, however, greatly affected the perceived strategic importance of Canadian Arctic waters. To be sure, there are possible routes from the Arctic to the Atlantic through these waters, but all present navigational challenges. The first two, the Nares Strait and the North West Passage, were tested by American nuclear submarines, the USS *Skate* and *Seadragon*, in 1960 and 1962 respectively. The Nares Strait, which leads from the Lincoln Sea into the Smith Sound between Greenland and Ellesmere Island, then to Baffin Bay and into Davis Strait, is more difficult than the North West Passage through the waters of the Canadian Arctic archipelago, via the McClure or Prince of Wales Strait, the Viscount Melville Sound, the Barrow Strait and Lancaster Sound. Surface ships have also negotiated this route in summer months with little difficulty in recent years. The third possible route through Arctic waters would involve the Hudson instead of the Davis Strait, but this would call for nearly superhuman navigational skills, since the narrow Fury and Hecla Straits as well as Foxe Basin are formidable obstacles indeed.

In contrast to NATO's lack of concern about the channels involving Canadian waters, the G-I-UK gap is the overwhelming preoccupation of NATO naval planners. Pointing like daggers into the heart of NATO waters, the wide channels in this broad expanse of water from Greenland to the Faeroes, the Shetlands, the Orkneys, and Scotland allow room for manoeuvre and escape. In contrast, it is not uncommon to hear, regarding the Canadian Arctic, the opinion that 'there is, from a military point of view, nowhere to go, and nothing to do when you get there'. Canadian waters appear also, unwisely, to have been written off as a possible Soviet route for outflanking NATO defences of the G-I-UK gap.

Canadian Naval policy in Arctic waters

Canadian naval planners have been very much impressed by this line of thought. The formative experience for the Canadian Navy was convoy escort during World War II. In the 1950s and 1960s it continued its single-minded pursuit of the ASW role, against increasing doubts that so overwhelming a commitment reflected the broader requirements of Canadian defence policy. In fact, the *Defence White Paper* of 1971 (which was not unrelated to developments in the Arctic, particularly the voyages of the SS *Manhattan* in



HMCS *Athabascan* watching over Russian stern trawlers in the Arctic.
Photograph courtesy of Canadian Forces

1969 and 1970) altered Canadian defence priorities: the protection of Canadian sovereignty was rated as the first priority, ahead of NORAD and NATO roles. Since the Canadian Navy does not have an Arctic capability and cannot exercise surveillance over Arctic waters, it appeared that the reordering of priorities would produce a greater balance in procurement programmes and military roles.

This has not happened. Recent strategic thinking in NATO has saved Canadian Maritime Command from the dangers of innovation. It is now argued that effective nuclear parity and a stable system of deterrence has made a nuclear exchange less likely than in the past; but this stalemate at maximum levels of violence increases the possibility of an extended conventional campaign in Europe. In this eventuality, resupply of the conflict zone in Europe would be as paramount as it was during the two World Wars. To accomplish this objective, the G-I-UK gap must be closed to Soviet attack submarines. Moreover, by helping to detect and track Soviet strategic submarines they contribute to an effective counter-force first strike – assisting therefore in the preservation of deterrence.

The Canadian Maritime Command needed little prodding from its NATO partners in agreeing to upgrade ASW capabilities in its Atlantic sector. Having obtained funding for a major new procurement programme, it predictably selected six helicopter destroyer escorts at a cost of $1.5 billion. They are essentially ASW workhorses to supplement the DDH-280 destroyers.

This has been most unfortunate. The NATO ASW role is, of course, important, but as the one all-consuming role it leaves Canadian Arctic waters denuded of enforcement capabilities. Present ships cannot operate safely on ice-covered waters or above 65° North latitude at any time of the year, and Canada has no submarine strength. The forthcoming fleet of frigates may be somewhat ice-strengthened for use in some areas of the Davis Strait but in no sense can they be considered Arctic-class vessels. Moreover, there is currently no fixed-bottom surveillance and indentification system for covering key Arctic channels and exits. In 1975 a small Polish schooner demonstrated the country's current weak state of Arctic surveillance by sailing undetected 350 miles into Canadian Arctic waters without permission or notification. US submarines can and do patrol Canadian waters (with or without notifying Ottawa), precisely at a time when Washington contests Canadian jurisdictional claims in those same waters.

Even in NATO's own terms the almost total neglect of the Canadian Arctic channels appears questionable. In the context of purely Canadian objectives it is even more difficult to understand. John Gellner, a long-time observer of the Canadian defence scene, assessing the gap between the *stated* Canadian defence priorities on the one hand and the neglect of Arctic waters on the other, summarises his view thus:

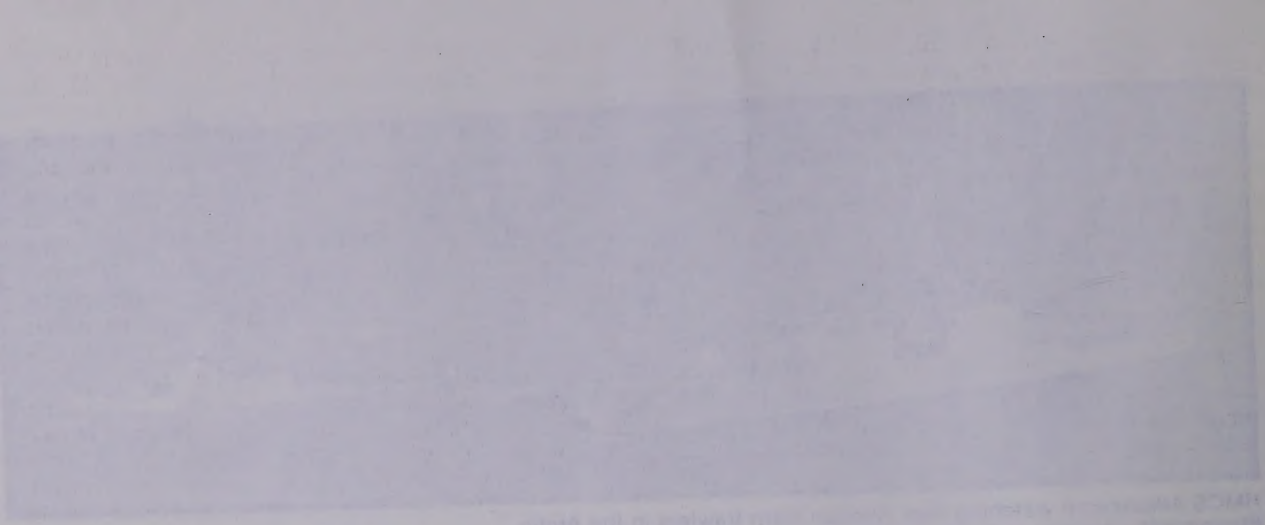
'One cannot but get the impression of a blithe belief in high places that all that would be needed would be to assert sovereignty and to arrogate special jurisdiction, without any thought of the possibility that declarations of rights may have to be backed by enforcement.'

Nevertheless, the fact remains that Canadian military planners continue to reject all arguments for a greater balance in naval roles. The Arctic, it is argued, can make do with non-military presence, in particular, the Canadian Coast Guard. We turn therefore to recent developments in Arctic shipping and technology in the last decade, which have transformed the prospects of the region.

New initiatives

Marine transportation is a central ingredient in harnessing the resources of the Canadian Arctic. Recent developments have greatly enhanced the prospects for resource development and commercial shipping in the Northwest Passage and throughout the waters of the Canadian Artic archipelago. Among the most important are the following:

- SS *Manhattan*: The SS *Manhattan* voyages of 1969 and 1970 permitted a conceptual breakthrough in demonstrating the feasibility of commercial traffic in Arctic waters and the North West passage. Traditional marine activity had centred on the re-supply of DEW-



line sites and Northern communities in the Eastern and Western Arctic. Not until the SS *Manhattan* trials, however, did Government circles appreciate the implications for Canada of a new maritime frontier.

● *Oil and natural gas exploration*: The discovery of oil and natural gas on the Alaskan North Slope in 1968 has stimulated similar exploration in the Mackenzie Delta-Beaufort Sea area as well as the Sverdrup Basin of the Canadian Arctic archipelago. Most of the attention to date has centred on natural gas, although an oil strike has been confirmed at Bent Horn, Cameron Island. After a decade of exploration in the Arctic Islands, 12.5 trillion cubic feet have been located, well below the required threshold reserves for a polar gas pipeline. But deep off-shore drilling in the Beaufort Sea is arousing considerable industrial interest, and it is acknowledged that a breakthrough in either area would transform the economic and therefore strategic significance of the High Arctic.

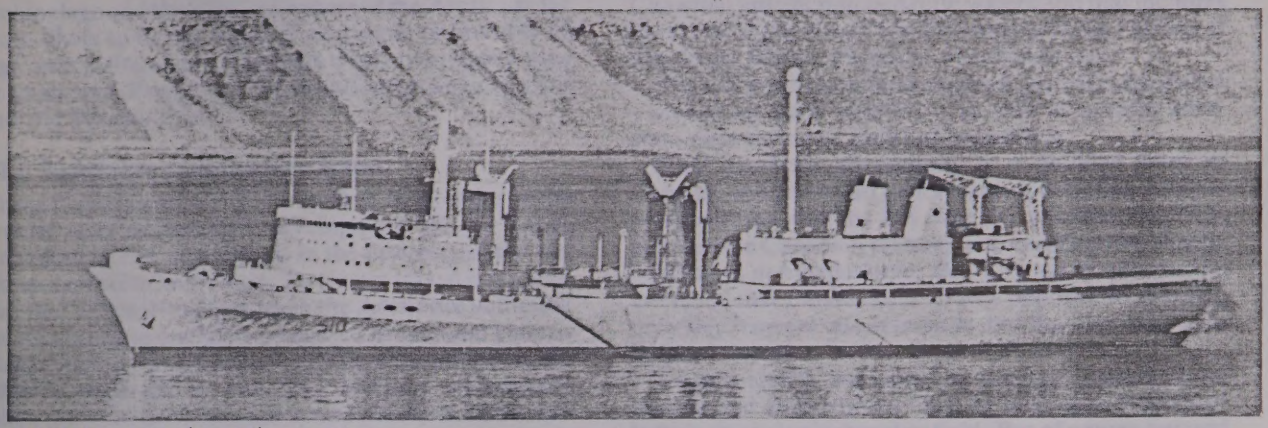
● *The MV Arctic*: The opening of the Nanisivik lead-zinc mines at Strathcona Sound – the first mine to be opened in Canada's high Arctic – has also led to the construction of the world's first heavy ice-breaking cargo ship, the MV *Arctic*. The 28,000 ton bulk-carrier, built by Port Weller Dry Docks Ltd (St Catharines, Canada) and operated by a firm composed of a consortium of Canadian shipping companies led by Federal Commerce and Navigation Ltd, represents a further erosion of the isolation of the North.

● *Icebreaker technology*: The last decade has also witnessed striking advances in icebreaking technology. Not surprisingly, the USSR has led the field. It launched the first nuclear-powered icebreaker in 1957, and currently the Arctic Ice-Class 7 *Arktika* (25,000 tons) and her sister ship, *Ledokoly*, are the world's largest icebreakers.* The US Coast Guard, which had fallen behind the Canadian Coast Guard in icebreaking capability, has also launched two polar icebreakers, the *Polar Star* and her sister ship, *Polar Sea*, which although only 13,000 tons displacement, carry 60,000shp (compared to the nuclear-powered *Arktika's* 75,000). Last year the *Arktika* stunned the marine world by smashing her way to the North Pole, leaving no doubt about her capabilities. The *Polar Star*, in contrast, encountered problems during her trials.

Canada now lags behind both nations in icebreaking capabilities. Its icebreaking fleet is ageing, and in any case was built for icebreaking services in the St Lawrence River and the Gulf of St Lawrence rather than for the Arctic. The most powerful Canadian icebreaker, the CCG *St Laurent* (15,000 tons at 24,000shp), was completed in 1969, and even the design for an Arctic Ice-Class 10 vessel will take two years to complete. However, in an interesting private-sector initiative, Dome Petroleum, a Canadian-based oil company active in off-shore drilling in the Beaufort Sea, has seriously considered the construction of an Ice-Class 10 ship colourfully called the *Arctic Marine Locomotive*, which, with a displacement of 45,000 tons and 150,000shp, would be the world's most powerful icebreaker, and would provide a year-round marine capability in Arctic waters.

*See *Navy international* November 1977

The Canadian Coast Guard icebreaker *Louis S St Laurent* in Arctic waters.
Photograph courtesy of Canadian Transport Department



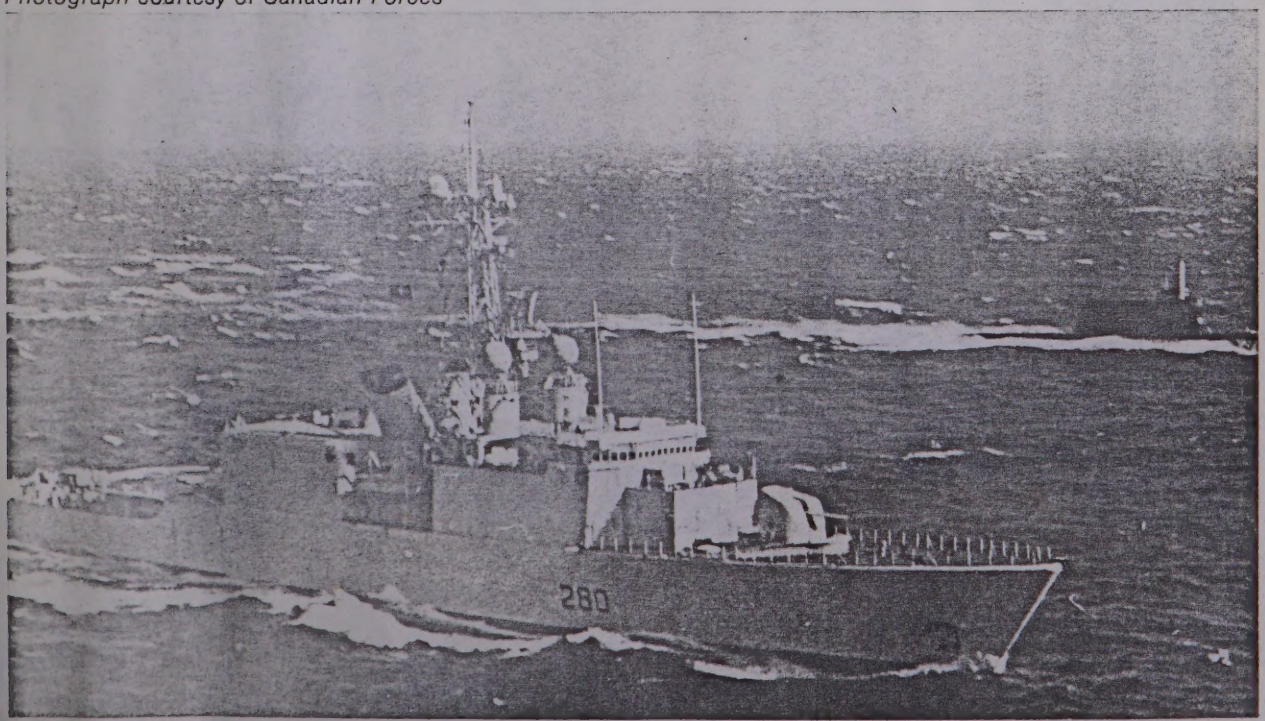
HMCS *Preserver* in northern waters.
Photograph courtesy of Canadian Department of Indian and Northern Affairs

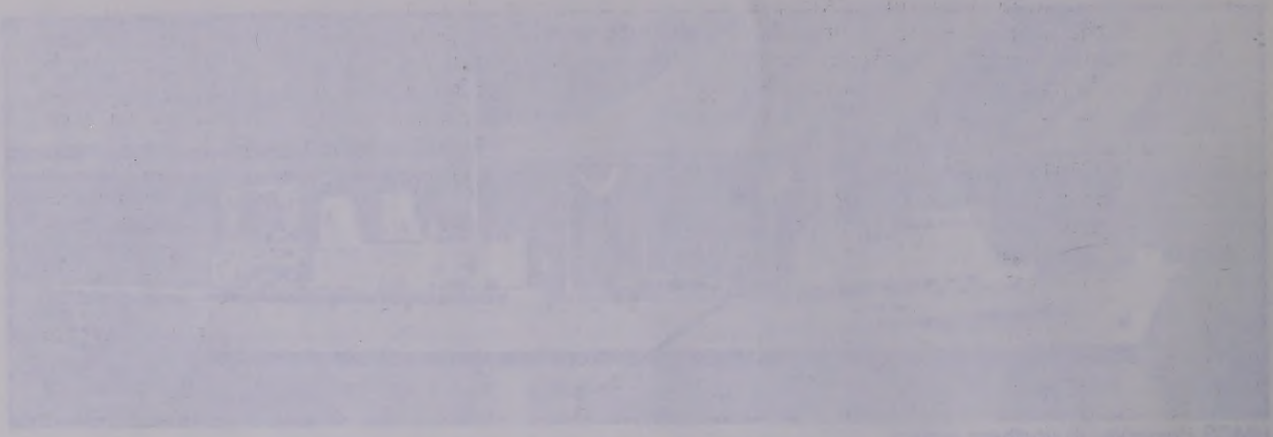
● *Liquified Natural Gas from the Arctic*: Probably the development which has contributed most to the recent growth of interest in Arctic shipping is serious industrial research into shipping liquified natural gas (LNG) from the Sverdrup Basin to markets on the Canadian Atlantic coast. Among these efforts, the so-called *Arctic Pilot Project* is the most interesting. Sponsored by a consortium of Canadian shipping and oil and gas companies (and still in its research phase), it represents the most ambitious research effort to date on the technological and economic problems associated with an LNG system in Arctic waters. Two or possibly three ice-breaking LNG tankers plying a route between Melville Island and an Atlantic seaboard terminal are envisaged. If successful, a fleet of LNG carriers would be built to carry Arctic natural gas, with enormous implications for Arctic seas.

These developments together mark the end of the isolation of what were until recently perceived as closed waters. Similarly, they mark the end of a period when Canadians thought about the North exclusively in terms of bush-pilots, the DEW-line and, more recently, pipelines. The technology for year-round navigation in Arctic waters is now available, and the resource development which would spur it may well materialise in the short rather than the long term. Successful delineation wells on Cameron Island would change the situation overnight.

In fact, the real challenge for Canada is more likely to come from the commercial and transportation advances than from the military threat discussed above. According to the Chief of the Operational Research and Analysis Establishment in the Canadian National Defence Department, 'the Canadian

HMCS *Iroquois* with a Russian submarine.
Photograph courtesy of Canadian Forces





archipelago and the adjacent waters of the Arctic are far more likely to be the scene of economic or possibly of legal and political developments over sovereignty than to be an area of military confrontation between NATO and the Warsaw Pact'.

The Northern sovereignty issue

From Canada's point of view what is at stake is the orderly and responsible development of the entire Canadian Arctic archipelago in the interests of the circumpolar region as a whole. To ensure this, it is imperative that national capabilities in the Arctic are sufficient for this purpose and give substance to national claims. Nature abhors a vacuum; it invites a repetition of the 1968-70 challenge to Canadian northern sovereignty when the USCG *Northwind* accompanied the SS *Manhattan* on her 1969 voyage, with Washington ostentatiously ignoring official Ottawa requests for prior notification. The US challenge, a repetition of the unsuccessful attempt two years earlier to probe Soviet waters – the USCG *Edisto* and *Eastwind* were refused innocent passage through the Vilkisky Straits and had to turn back – caused serious damage in Canadian-American relations. It also provided the main stimulus for the now famous *Arctic Waters Pollution Prevention Act*, which, along with the extension of the territorial sea to 12 miles (thus enclosing the gateways to the North-West Passage) represented Ottawa's answer to the US challenge. Canada's position is that the waters of the Canadian Arctic archipelago are internal waters and that the North West Passage does not constitute an international strait.

Although the tension between Ottawa and Washington over the northern sovereignty issue has eased considerably recently, the potential for disagreement is very real. The US rejects what it calls the 'extension' of Canadian jurisdiction in Arctic waters and that includes the status of the North West Passage and the validity of the *Arctic Waters Pollution Prevention Act*.

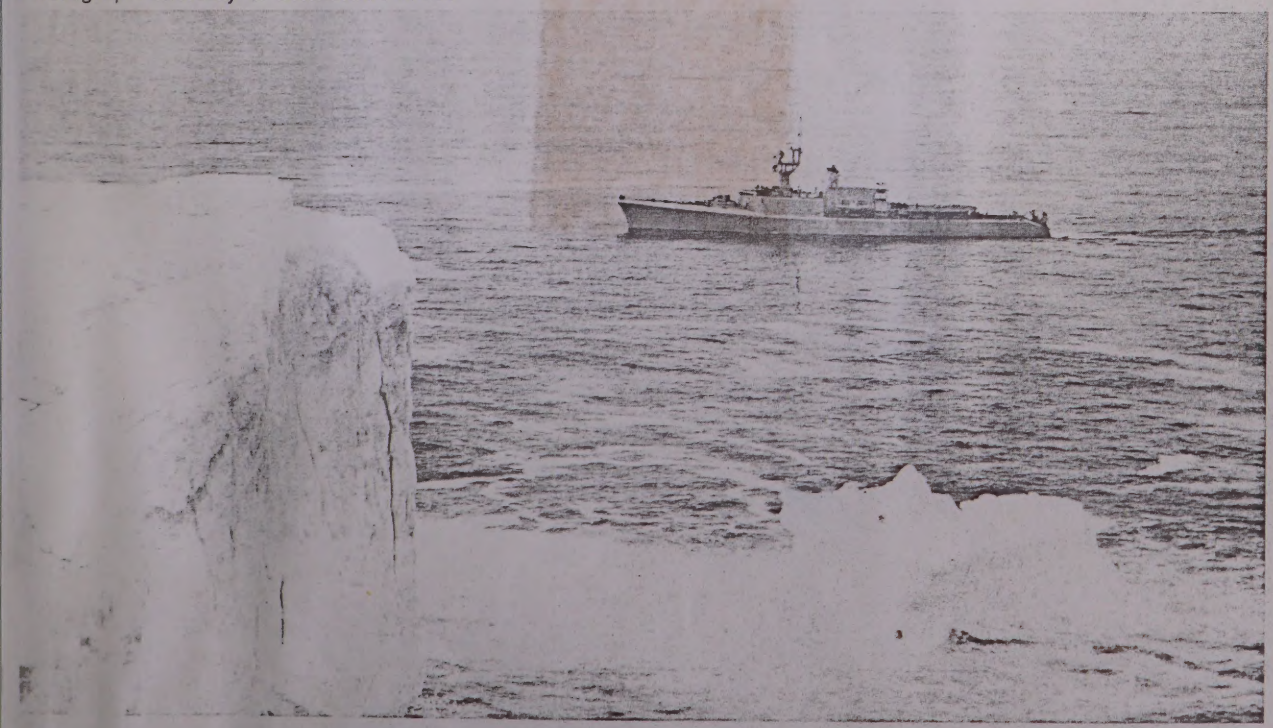
The US position reflects national security objectives – maximum naval mobility – as well as normal interstate economic and political bargaining.

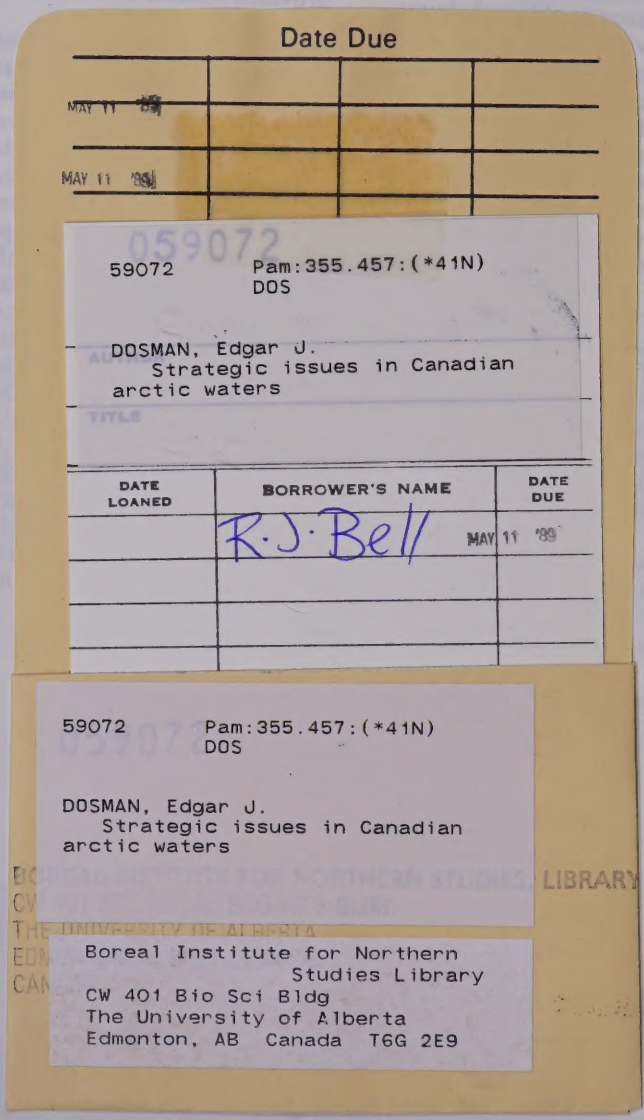
Since northern sovereignty is a political issue in Canada, and given the importance of avoiding another confrontation with the US over the question, the most appropriate Canadian strategy is to demonstrate that its position is non-negotiable: that it is not hostile to US interests; that Canada is in no way opposed to shipping provided it meets safe standards, but that the waters are in fact internal.

To accomplish this purpose, the key ingredients of control and enforcement must be maintained, particularly in the polar icebreaker field. But of course beyond the narrow issue of state sovereignty, the purposes of Arctic capabilities include research, economic development and pollution control, navigational aids, SAR and the host of tasks that accompany the opening of a new region in a circumpolar context.

It is therefore absurd that the Canadian Coast Guard has fallen behind in icebreaker construction, particularly the US. Ultimately a country must recognise its geographic facts of life. Until 'effective occupation' is achieved, northern sovereignty will remain contentious and present Canadian jurisdictional claims in northern waters cannot be enforced. In this context it is unacceptable to deny funds to the Canadian Coast Guard for icebreaker construction and to purchase six destroyers for NATO at a cost of $1.5 billion. The issue ultimately is one of balance. The implications of new developments in Arctic seas have not yet apparently been appreciated in the Canadian defence establishment. □

HMCS *Margaree* in Arctic waters.
Photograph courtesy of Canadian Forces





Date Due

MAY 11 '89

MAY 11 '89

059072

59072 Pam:355.457:(*41N)
DOS

DOSMAN, Edgar J.
Strategic issues in Canadian arctic waters

TITLE

DATE LOANED	BORROWER'S NAME	DATE DUE
	R.J. Bell	MAY 11 '89

59072 Pam:355.457:(*41N)
DOS

DOSMAN, Edgar J.
Strategic issues in Canadian arctic waters